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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,004	09/28/2001	Arnold Jeffery Daks	AUS9-2001-0767-US1	4835
To 1590 06/06/2006  Leslie A. Van Leeuwen  International Business Machines Corporation  Intellectual Property Law Dept., Internal Zip 4054  11400 Burnet Road  Austin, TX 78758			EXAMINER	
			ROMANO, JOHN J	
			ART UNIT	PAPER NUMBER
			2192	THE ERE THORIDER
			DATE MAILED: 06/06/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)					
Office Assistant Communication	09/966,004	DAKS ET AL.					
Office Action Summary	Examiner	Art Unit					
	John J. Romano	2192					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the d	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 09 M	larch 2006						
	action is non-final.						
	, <del> _</del>						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-31</u> is/are pending in the application							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-31</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/o	8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9) The specification is objected to by the Examine	ΣΓ.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)  1) Notice of References Cited (PTO-892)	A) Intensions Comment	(PTO-413)					
1) \( \square\) Notice of References Cited (PTO-892) 2) \( \square\) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail Da						
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5)  Notice of Informal F 6)  Other:	Patent Application (PTO-152)					

## **DETAILED ACTION**

#### Remarks

1. In view of the appeal brief filed on March 09<sup>th</sup>, 2006, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

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### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-6, 8-13, 15-20 and 22-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Song et al., US 5,949,999 (hereinafter Song).

In regard to claim 1, Song discloses:

- "A computer controlled display system for tracking the development of complex software products having a plurality of developmental lines..."
   (E.g., see Figure 3 & Column 1, lines 37-41), wherein a display which guides tracking of software development documents or products having a plurality of developmental lines is disclosed.
- "...means for tracking each of said developmental lines to determine the reached checkpoints; and means for ...indicating said reached checkpoints." (E.g., see Figure 3 & Column 4, lines 56-65), wherein the means is for tracking the development of software components in a project, wherein a progress status panel is illustrated, which illustrates via the interface (display) reached attributes of checkpoints with by marking the activities (checkpoints) that are completed.

But **Song** does not expressly disclose "...means for setting in each of said plurality of developmental lines, a sequence of checkpoints..." or "...means for simultaneously displaying....". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide "...means for setting in each of said plurality of developmental lines, a sequence of checkpoints..." The motivation to do so was provided by Song's teaching (E.g., see Figure 3 & Column 3, lines 57-58), wherein a user defines procedures (checkpoints) to be performed during the project execution, wherein the particular system component would correspond to a respective developmental line as illustrated in Figure 3. Furthermore, the checkpoints are illustrated in a sequence from left to right as illustrated in Figure 2.

It also would have been obvious to one of ordinary skill in the art, at the time the invention was made to "simultaneously display said plurality of developmental lines as claimed. It is old and well known in the art to display a plurality of developmental lines being tracked on such software as Microsoft Project, etc. Song also teaches simultaneous displaying a list of said plurality of development lines, as disclosed in Figure 3, wherein the plurality of developmental lines are displayed singularly as taught above. Thus it would have been obvious to one of ordinary skill in the art to simultaneous display the plurality of developmental lines.

In regard to claim **2**, the rejections of base claim **1** are incorporated. Furthermore, **Song** discloses:

- "...means for modifying said developmental lines and said checkpoints..." (E.g., see Figure 2 & Column 3, lines 58-62), wherein

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the set of required documents and procedures (checkpoints) will change (modify) depending on the software component they are associated with.

"...and means for displaying said modifications." (E.g., see Figure 3 & Column 4, lines 58-63), wherein a marked activity shows that the document is available and hidden activities are those omitted. Others are yet to be developed.

In regard to claim **3**, the rejections of base claim **2** are incorporated. But, **Song** does not expressly disclose "... means for displaying at each of said checkpoints, a set of developmental attributes for said checkpoint.". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to produce a summary of the "overview" or "planning" or "test" checkpoint comprising attributes during development of software.

In regard to claim **4**, the rejections of base claim **3** are incorporated. Furthermore, **Song** discloses:

"...means for modifying said developmental attributes for each of said checkpoints; and means for displaying said modifications at each of said checkpoints." (E.g., see Figure 3 & Column 3, lines 57-65), wherein the documents (attributes) are changed (modifying) according to the requirements of the project execution and displayed accordingly as illustrated.

In regard to claim **5**, the rejections of base claim **3** are incorporated. Furthermore, **Song** discloses:

"... said developmental attributes include actions performed in said
 software product development." (E.g., see Figure 3 & Column 4, lines
 21-22), wherein the activities (actions) are selected.

In regard to claim **6**, the rejections of base claim **5** are incorporated. Furthermore, **Song** discloses:

- "... means for modifying said actions." (E.g., see Figure 3 & Column 3, lines 57-65), wherein procedures and documents will change (modify) depending on the software component they are associated with. For example, activity (actions) Hazard Analysis may not need to be carried out on a non-safety-critical software component.

But **Song** does not expressly disclose "switch said actions to other of said developmental lines". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to switch the action to other of said developmental lines. The motivation to do so was suggested by **Song** "This variant of the organization's development procedure can be easily represented by the mechanism and changes depending on the selected system component." (E.g., Column 3, lines 63-65) Furthermore, **Song** discloses, "activity Hazard Analysis may not need to be carried out on a non-safety-critical software component" (E.g., Column 3, lines 60-62). Thus, it may be carried out on a safety-critical software component on a different developmental line. Thus, to remove a particular action from one developmental line and implement

the same action in another is interpreted as switching. Therefore, it would have been obvious to switch said actions to other of said developmental lines.

In regard to claim 22, Song discloses:

- "A computer controlled display system for tracking the building of a program product from a functional implementation stage to a complete integrated program product..." (E.g., see Figure 3 & Column 1, lines 37-41), wherein a display which guides tracking of software development documents or products having a plurality of developmental lines is disclosed. Furthermore, Figure 3 illustrates the status of Implementation and Integration phases.
- "...a plurality of developmental lines respectively corresponding to each of a plurality of program components to be integrated into said complete program product..." (E.g., see Figure 3 & Column 3, lines 57-58), wherein a user defines procedures (checkpoints) to be performed during the project execution, wherein the particular system component would correspond to a respective developmental line as illustrated in Figure 3, and the system components integrated together would be the software system (complete product).
- "... means for tracking each of said developmental lines to determine the reached checkpoints; and means for...displaying said plurality of developmental lines and indicating said reached checkpoints." (E.g., see Figure 3 & Column 4, lines 56-65), wherein the means is for

tracking the development of software components in a project, wherein a progress status panel is illustrated, which illustrates via the interface (display) reached checkpoints with by marking the procedures (checkpoints) that are completed.

See claim 1 for the remaining limitations.

As per claims **8-13** and **25**, this is a method version of the claimed system discussed above, in claims **1-6** and **22**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Column 7, lines 31-33), wherein a method of the above system is disclosed.

As per claims **15-20** and **28**, this is a computer program version of the claimed system discussed above, in claims **1-6** and **22**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

In regard to claim 23, the rejections of base claim 22 are incorporated. But Song does not expressly disclose "related to the compatibility functions of said checkpoint line". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to include attributes that are related to the compatibility functions of said checkpoint line. The motivation to do so was suggested by (E.g. see, Figure 3 & Column 1, lines 37-45), wherein Song discloses "the present invention is a mechanism that integrates software engineering and system components to guide the browsing/tracking of software development documents (e.g., ...testing) ...this capability

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is useful...for developing and validating safety-critical software systems". It would have been obvious, to one of ordinary skill, at the time the invention was made, to include compatibility functions in the testing. Furthermore, **Song** discloses, "testing" in Figure 3. Therefore, it would have been obvious to include attributes "related to the compatibility functions of said checkpoint line. See claim 3 for the remaining limitations.

In regard to claim **24**, the rejections of base claim **22** are incorporated. Furthermore, **Song** discloses:

"...means for modifying said attributes for each of said checkpoints; and means for displaying said modifications at each of said checkpoints." (E.g., see Figure 3 & Column 3, lines 57-65), wherein the documents (attributes) are changed (modifying) according to the requirements of the project execution and displayed accordingly as illustrated.

As per claims **26** and **27**, this is a method version of the claimed system discussed above, in claims **6** and **23**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Column 7, lines 31-33), wherein a method of the above system is disclosed.

As per claims **29** and **30**, this is a computer program version of the claimed system discussed above, in claims **6** and **23**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

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2. Claims **7, 14, 21** and **31** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Song** in view of Hopwood et al., US 6,223,343 B1 (hereinafter **Hopwood**).

In regard to claim **7**, the rejections of base claim **2** are incorporated. Furthermore, **Song** discloses:

"...means for storing, in association with said means for displaying, the data tracked by said means for tracking; and means for communicating the data tracked to said means for storing." (E.g., see Figure 4 (element 16) & Column 5, lines 38-42), wherein the document repository (store) stores the data tracked in association with displaying, wherein the data inherently is communicated to the document repository.

But **Song** does not expressly disclose, "said means for tracking are remote from said means for displaying". However, **Hopwood** discloses:

 "... said means for tracking are remote from said means for displaying..." (E.g., see Figure 6 & Column 15, lines 22-31), wherein the RMS (means for tracking) is remote from the means for displaying.

**Song** and **Hopwood** are analogous art because they are both concerned with the same field of endeavor, namely, managing/tracking the development of a software product. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine **Hopwoods'** remote means for tracking

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with **Songs'** software tracking system. The motivation was provided by **Song** in developing a tracking mechanism "for any organization that produces safety-critical software system". Therefore, it would be obvious, to one of ordinary skill in the art, to access the system remotely as many organizations have developers and managers in remote locations. Thus it would have been obvious to combine **Hopwoods'** remote means for tracking with **Songs'** software tracking system.

As per claim **14**, this is a method version of the claimed system discussed above, in claim **7**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Column 7, lines 31-33), wherein a method of the above system is disclosed.

As per claim **21**, this is a computer program version of the claimed system discussed above, in claim **7**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

As per claim **31**, this is a method version of the claimed method discussed above, in claims **8-14**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Song** (Column 7, lines 31-33), wherein a method of the above system is disclosed.

#### Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Romano whose telephone number is (571) 272-3872. The examiner can normally be reached on 8-5:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**JJR** 

TUAN DAM SUPERVISORY PAI ENT EXAMINER